3: Barrett E-5 (1908-1909)1925
SD6 Cayapa SD6

[487] 484 along these rivers—these are used for hunting or for short trips from the rivers. All the permanent habitations are situated along the banks of the rivers, and to pass from one to another of these, as well as for making trips of greater length, the dug-out canoe, called kū'le, 502 is used. In fact, the canoe is one of the most prominent features of Cayapa life. Everyone begins in early childhood the training which makes him an expert canoeman, and is perfectly at home in a dug-out, whether it be along the smooth sluggish waters of the lower course of the river, in the rapids of the upper course, or out on the ocean coasting to some nearby point.

396 824 From the important place the canoe holds in the life of the people, it is natural that much care should be given to its construction and that the art of canoe-making should have reached a high state of perfection. Of the many species of trees in the jungle, only a few produce woods which are hard and tough enough to be suitable for canoe-making. These qualities are found in certain species which have what may be called a criss-cross grain, that is, an interlacing of the wood fibers which makes splitting almost impossible. Though a considerable degree of hardness is required, too great hardness is not desirable. Certain woods, therefore, such as the guayacan, are too hard and heavy to be suitable.

396 [313] Having found a tree of the desired kind, it is felled with an ax and the canoe is roughly fashioned from a portion of its trunk, as is shown in pl. LXX, and finally this section is cut loose from the remainder of the tree.

3: Barrett E-5 (1903-1909)1925
SD6 Cayapa SD6

securing this end of the cable, since it is necessary to have one end small in order to pass it through the opening in the prow of the canoe or for whatever other purpose it may be used. Ordinarily the cables are not tied about the prow of the canoe, but are simply passed up through the hole in the prow above mentioned, the knot in the cable below the prow holding it securely.

For ordinary purposes of travel and for carrying regular loads the canoe above described is sufficient. If, however, an excessively heavy or bulky and unstable cargo is to be transported, it is necessary to increase the buoyancy or to steady the canoe by means of outriggers, called by the Spanish name balsas, Cayapa na'na. In this region the term *balsa* has four significations. It is primarily a raft or float of any kind, and is the term naturally applied to the rafts of logs or bamboo which the Indians float down the river for sale at the settlements. The same term is applied to the outriggers used on canoes, as also to the tree and its wood from which these are made. This wood is very light, even when green or water-soaked, and when dry it is as light and soft as cork, qualities which make it very useful in numerous ways. The chief uses of balsa wood, however, are due to its buoyancy: it will carry in water much more than its own weight, and it is therefore used in rafting such heavy timber as guayacan. In this process, as many logs of balsa are procured as are necessary to sustain the weight of the guayacan, and these are lashed together into a float, the guayacan timbers being lashed on top of them. The guayacan timbers

3: Barrett E-5 (1908-1909)1925
SD6 Cayapa SD6

505 are rafted down-stream for use as house-posts, but the
●313 balsa logs are also readily sold in the settlements for making outriggers, since they are much used on the imbaburas, or very large canoes, employed to lighter cargoes to and from sea-going vessels.

501 Among the Cayapa such outriggers are sometimes
505 used, but ordinarily the Indians travel with a cargo so light that the outrigger is not needed. When, however, it is necessary to increase the carrying capacity of a canoe in this manner, logs of balsa from four to eight inches in diameter are cut the proper length, and their forward ends are brought to a form more or less like that of the prow of the canoe. At the middle of the canoe is bound, by means of the two small holes in the gunwales (mentioned as being used in the hauling of the canoe from the woods to the river), a cross-bar of sufficient length to project far enough on each side of the canoe to permit the binding of these logs to it. In binding the logs to this middle transverse bar a block of wood, three or four inches in thickness, is inserted between the upper surface of the log and the bar, thus forcing the log farther into the water at this point. The forward and after ends of the log are each lashed to a similar small hole in the gunwale near the prow, and the stern respectively, these ends being brought up nearly to a level with the gunwale itself and thus three or four inches higher than the middle of the log. In the case of very large canoes, and especially of the imbaburas above mentioned, sometimes as many as three of these logs, as much as a foot or more in diameter, are lashed

3: Barrett E-5 (1908-1909)1925
SD 6 Cayapa SD6

above tabulation, these several distinct forms of baskets have special uses. The four types of burden-basket are used almost exclusively for carrying heavy loads upon the back. The two types made of hoja de chapil are, as above stated, only for temporary use and are worthless except while the leaves are green. They are also sometimes used, even after they are dry and brittle, by the shamans in their medicine practices. The other two types, which are made of the very durable pitigua, are sometimes used as storage receptacles about the house when not needed for carrying burdens, which is their primary use.

The flaring basket, kū'bī (pl. XCII, 7), is carried by means of a single band provided with a special, wide head-band that passes across the top of the head as the bearer bends forward. This is primarily a woman's burden-basket and is used in the daily home life of the people for bringing fruits and other products from the fields and in a multitude of other ways. It is, however, rarely used in carrying wood, which is so often one of the most important functions of burden-baskets among aboriginal peoples. Wood is usually brought by the canoe-load from some point near the river where a suitable dead tree can be found.

The straight-walled basket, fe' pickalyī (pl. XCII, 6, 8), is made especially for carrying burdens considerable distances, as on long trail journeys into the interior. Within their own territory these baskets are rarely needed by the Cayapa, since practically all travel is by canoe. Such a basket is provided with two burden-bands attached near the top and the bottom respectively,

to maintain a precarious balance. Children from about the ages of nine to thirteen may have small canoes /kakúle/ made for them, which may be seven to eight feet in length, and scarcely a foot in width. At these ages boys begin to accompany their fathers into the monte where the canoes are roughed out by axe and adze. They learn to select the proper trees as only those that are tightly cross-grained will not split easily. Occasionally canoes are roughed out at some height above the creek or rivulet that feeds into the main channel and in the process of carefully snubbing them down the boys learn to rig lines. A large canoe, about thirty-five feet long, may require almost a dozen men to bring it into the water from the monte, whereas a small canoe can be brought in by two or three men. Despite the fact that by the time the boys have reached their late teens they have acquired a large measure of skill in handling canoes, their canoes are nevertheless not considered finely finished until they have had several more years of experience.

Paddles: /yámpa/. The oar is roughed out with a machete, and the finer lines are cut with a knife.

diet now, but the leaves are in demand for roofing material. Another cash crop is hardwood trees, but they are not often planted; enterprising individuals cut them out of the unclaimed forest.

Land is seldom held in one large block. It is usually scattered about among other holdings so that, quite often, choice properties are separated by distances involving several day's travel. Many Cayapa have two houses, each built as close as possible to their main holdings. Inevitably, they must spend considerable time away from large sections of their property and, as a result, Negroes often illegally harvest standing crops or, perhaps, plant their own. Negroes may buy land from the Cayapa, but as the banana economy continues to boom, the Indians are more and more reluctant to sell. Sometimes usufruct is rented by the Negro, usually for a share of the profits, but arguments invariably develop. It is said that the Indian is always at a disadvantage in his dealings with the Negro because of the latter's readiness to engage in witchcraft and "spoil" the land for the Indian owner. If several members of an Indian's family sicken or die, after a recent quarrel with a Negro about land, it is assumed that witchcraft has been